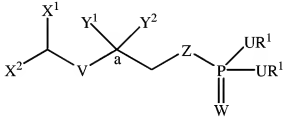
LISTING OF CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (Currently Amended) A compound having the formula I



I

wherein

X^1, X^2, Y^1, and Y^2 comprises, independently, hydrogen, fluorine, a hydroxyl group, a branched or straight chain C_1 to C_{25} alkyl group, OR^2, $OCH_2CH_2OR^2$, $OC(O)R^3$, or $NC(O)R^3$;

each U comprises, independently, oxygen, sulfur, or NR^1;

V is not present or when V is present, V comprises oxygen or sulfur;

W comprises oxygen or sulfur;

Z comprises oxygen, sulfur, NR^1, ~~CH_2~~, CHF, CF_2, or $CHOR^2$;

each R^1 comprises, independently, hydrogen, a branched or straight chain C_1 to C_{25} alkyl group, a cationic counterion, or both R^1 form a cyclic or heterocyclic group;

R^2 comprises hydrogen, a branched or straight chain C_1 to C_{25} alkyl group, a cycloalkyl group, a heterocycloalkyl group, an aryl group, a heteroaryl group or a protecting group;

R^3 comprises a branched or straight chain C_1 to C_{25} alkyl group, a cycloalkyl group, a heterocycloalkyl group, an aryl group, a heteroaryl group,

or ~~the~~ a pharmaceutically acceptable salt or ester thereof,

wherein when Y^1 and Y^2 are different groups, the stereochemistry at carbon a is either substantially R or substantially S, and

wherein the compound having the formula I is not 1-acyl-*sn*-glycerol 3-phosphate and 2-acyl-*sn*-glycerol 3-phosphate, and

wherein when V is not present, W is oxygen, X^1 and Y^1 are hydrogen, and X^2 is hydroxyl, then Y^2 is not hydroxyl.

2. (Original) The compound of claim 1, wherein each U and W comprises oxygen and V is not present.

3. (Withdrawn) The compound of claim 2, wherein Z comprises oxygen, X^1 comprises hydrogen, and X^2 comprises fluorine.

4. (Withdrawn) The compound of claim 3, wherein Y^1 comprises hydrogen, Y^2 comprises $OC(O)R^3$, wherein R^3 comprises a branched or straight chain C_1 to C_{25} alkyl group, and R^1 comprises hydrogen.

5. (Canceled)

6. (Original) The compound of claim 2, wherein Z comprises oxygen, Y^1 comprises hydrogen, and Y^2 comprises fluorine.

7. (Withdrawn) The compound of claim 6, wherein X^1 comprises hydrogen, X^2 comprises $OC(O)R^3$, wherein R^3 comprises a branched or straight chain C_1 to C_{25} alkyl group, and each R^1 comprises hydrogen.

8. (Original) The compound of claim 2, wherein Z comprises CHF, Y^1 comprises hydrogen, and Y^2 comprises a hydroxyl group.

9. (Withdrawn) The compound of claim 8, wherein X^1 comprises hydrogen, X^2 comprises $OC(O)R^3$, wherein R^3 comprises a branched or straight chain C_1 to C_{25} alkyl group, and each R^1 is hydrogen.

10. (Canceled)

11. (Withdrawn) The compound of claim 8, wherein X^1 comprises hydrogen, X^2 is $OC(O)R^3$, wherein R^3 comprises a branched or straight chain C_1 to C_{25} alkyl group, and each R^1 comprises ethyl.

12. (Canceled)

13. (Withdrawn) The compound of claim 2, wherein Z comprises CHF, Y^1 comprises hydrogen, and Y^2 comprises an alkyl group.

14. (Withdrawn) The compound of claim 13, wherein X^1 comprises hydrogen, X^2 comprises a silyl group, a hydroxyl group, or $OC(O)R^3$, wherein R^3 comprises a branched or straight chain C_1 to C_{25} alkyl group, and each R^1 comprises ethyl or each R^1 comprises hydrogen.

15. (Withdrawn) The compound of claim 2, wherein Z comprises CHF, Y^1 comprises hydrogen, and Y^2 comprises an $OC(O)R^3$, wherein R^3 comprises a branched or straight chain C_1 to C_{25} alkyl group.

16. (Canceled)

17. (Withdrawn) The compound of claim 2, wherein Z comprises CF_2.

18. (Withdrawn) The compound of claim 17, wherein Y^1 comprises hydrogen, Y^2 comprises $OC(O)R^3$, wherein R^3 comprises a branched or straight chain C_1 to C_{25} alkyl group, and each R^1 comprises an ethyl group or a sodium ion.

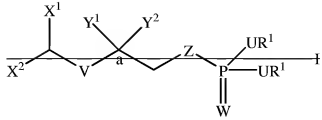
19. (Withdrawn) The compound of claim 18, wherein X^1 comprises hydrogen and X^2 comprises OH or $OC(O)R^3$, wherein R^3 comprises a branched or straight chain C_1 to C_{25} alkyl group.

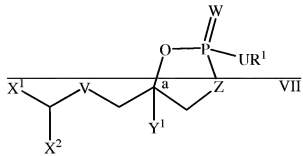
20. (Withdrawn) The compound of claim 17, wherein X^1 comprises hydrogen, X^2 is $OC(O)R^3$, wherein R^3 comprises a branched or straight chain C_1 to C_{25} alkyl group, and each R^1 comprises an ethyl group or a sodium ion.

21. (Withdrawn) The compound of claim 20, wherein Y^1 comprises hydrogen and Y^2 comprises OH or $OC(O)R^3$, wherein R^3 comprises a branched or straight chain C_1 to C_{25} alkyl group.

Claims 22-72 Cancelled

73. (Withdrawn-currently amended) A method for improving wound healing in a subject in need of such improvement, comprising contacting the wound of a mammal with a compound <u>of claim 1</u>. ~~having the formula I or VII or a pharmaceutical composition thereof~~





wherein

~~X^1, X^2, Y^1, and Y^2 comprises, independently, hydrogen, fluorine, a hydroxyl group, a branched or straight chain C_1 to C_{25} alkyl group, OR^3, $OCH_2CH_2OR^3$, $OC(O)R^3$, or $NC(O)R^3$;~~

~~each U comprises, independently, oxygen, sulfur, or NR^1;~~

~~V is not present or when V is present, V comprises oxygen or sulfur;~~

~~W comprises oxygen or sulfur;~~

~~Z comprises oxygen, sulfur, NR^1, CH_2, CHF, CF_2, or $CHOR^3$;~~

~~each R^1 comprises, independently, hydrogen, a branched or straight chain C_1 to C_{25} alkyl group, a cationic counterion, or both R^1 form a cyclic or heterocyclic group;~~

~~R^3 comprises hydrogen, a branched or straight chain C_1 to C_{25} alkyl group, a cycloalkyl group, a heterocycloalkyl group, an aryl group, a heteroaryl group or a protecting group;~~

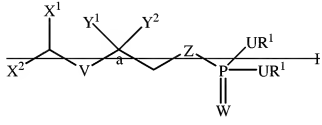
~~R^3 comprises a branched or straight chain C_1 to C_{25} alkyl group, a cycloalkyl group, a heterocycloalkyl group, an aryl group, a heteroaryl group,~~

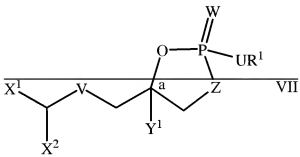
~~or the pharmaceutically acceptable salt or ester thereof,~~

~~wherein when Y^1 and Y^2 in formula I are different groups, the stereochemistry at carbon a is either substantially R or substantially S, and~~

~~wherein the compound having the formula I is not 1-acyl *sn*-glycerol-3-phosphate and 2-acyl *sn*-glycerol-3-phosphate.~~

74. (Withdrawn-currently amended) A method for treating or preventing in a subject a disease comprising administering to the subject a compound <u>of claim 1</u>. ~~having the formula I or VII or a pharmaceutical composition thereof~~





~~wherein~~

~~X^1, X^2, Y^1, and Y^2 comprises, independently, hydrogen, fluorine, a hydroxyl group, a branched or straight chain C_1 to C_{25} alkyl group, OR^3, $OCH_2CH_2OR^3$, $OC(O)R^3$, or $NC(O)R^3$;~~

~~each U comprises, independently, oxygen, sulfur, or NR^1;~~

~~V is not present or when V is present, V comprises oxygen or sulfur;~~

~~W comprises oxygen or sulfur;~~

~~Z comprises oxygen, sulfur, NR^1, CH_2, CHF, CF_2, or $CHOR^3$;~~

~~each R^1 comprises, independently, hydrogen, a branched or straight chain C_1 to C_{25} alkyl group, a cationic counterion, or both R^1 form a cyclic or heterocyclic group;~~

~~R^3 comprises hydrogen, a branched or straight chain C_1 to C_{25} alkyl group, a cycloalkyl group, a heterocycloalkyl group, an aryl group, a heteroaryl group or a protecting group;~~

~~R^3 comprises a branched or straight chain C_1 to C_{25} alkyl group, a cycloalkyl group, a heterocycloalkyl group, an aryl group, a heteroaryl group,~~

~~or the pharmaceutically acceptable salt or ester thereof,~~

~~wherein when Y^1 and Y^2 in formula I are different groups, the stereochemistry at carbon a is either substantially R or substantially S,~~

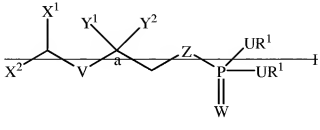
~~wherein the compound having the formula I is not 1-acyl *sn*-glycerol 3-phosphate and 2-acyl-*sn*-glycerol 3-phosphate, and~~

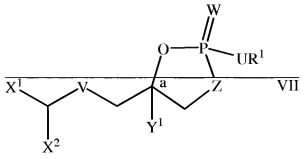
~~wherein with formula VII, when W is oxygen, V is not present, X^1 and Y^1 are hydrogen, and X^2 is $OC(O)R^3$, then Z is not CH_2 or oxygen.~~

75. (Withdrawn) The method of claim 74, wherein the disease comprises cancer or diabetes.

76. (Canceled)

77. (Withdrawn-currently amended) A method for reducing inflammation or an allergic response in a subject comprising administering to the subject a compound of claim 1. ~~having the formula I or VII or a pharmaceutical composition thereof~~





wherein

X^1, X^2, Y^1, and Y^2 comprises, independently, hydrogen, fluorine, a hydroxyl group, a branched or straight chain C_1 to C_{25} alkyl group, OR^3, $OCH_2CH_2OR^3$, $OC(O)R^3$, or $NC(O)R^3$;

each U comprises, independently, oxygen, sulfur, or NR^4;

V is not present or when V is present, V comprises oxygen or sulfur;

W comprises oxygen or sulfur;

Z comprises oxygen, sulfur, NR^4, CH_2, CHF, CF_2, or $CHOR^3$;

each R^4 comprises, independently, hydrogen, a branched or straight chain C_1 to C_{25} alkyl group, a cationic counterion, or both R^4 form a cyclic or heterocyclic group;

R^3 comprises hydrogen, a branched or straight chain C_1 to C_{25} alkyl group, a cycloalkyl group, a heterocycloalkyl group, an aryl group, a heteroaryl group or a protecting group;

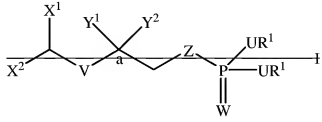
R^3 comprises a branched or straight chain C_1 to C_{25} alkyl group, a cycloalkyl group, a heterocycloalkyl group, an aryl group, a heteroaryl group,

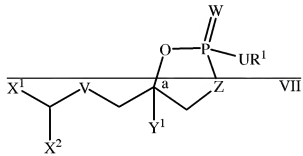
or the pharmaceutically acceptable salt or ester thereof,

wherein when Y^1 and Y^3 in formula I are different groups, the stereochemistry at carbon a is either substantially R or substantially S, and

wherein the compound having the formula I is not 1-acyl *sn*-glycerol 3-phosphate and 2-acyl *sn*-glycerol 3-phosphate.

78. (Withdrawn-currently amended) A method for increasing or altering cardiovascular function in a subject comprising administering to the subject a compound of claim 1. ~~having the formula I or VII or a pharmaceutical composition thereof~~





~~wherein~~

~~X^1, X^2, Y^1, and Y^2 comprises, independently, hydrogen, fluorine, a hydroxyl group, a branched or straight chain C_1 to C_{25} alkyl group, OR^3, $OCH_2CH_2OR^3$, $OC(O)R^3$, or $NC(O)R^3$;~~

~~each U comprises, independently, oxygen, sulfur, or NR^1;~~

~~V is not present or when V is present, V comprises oxygen or sulfur;~~

~~W comprises oxygen or sulfur;~~

~~Z comprises oxygen, sulfur, NR^1, CH_2, CHF, CF_2, or $CHOR^3$;~~

~~each R^1 comprises, independently, hydrogen, a branched or straight chain C_1 to C_{25} alkyl group, a cationic counterion, or both R^1 form a cyclic or heterocyclic group;~~

~~R^3 comprises hydrogen, a branched or straight chain C_1 to C_{25} alkyl group, a cycloalkyl group, a heterocycloalkyl group, an aryl group, a heteroaryl group or a protecting group;~~

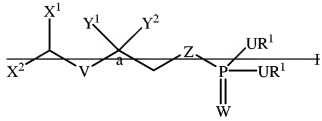
~~R^3 comprises a branched or straight chain C_1 to C_{25} alkyl group, a cycloalkyl group, a heterocycloalkyl group, an aryl group, a heteroaryl group,~~

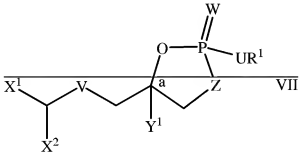
~~or the pharmaceutically acceptable salt or ester thereof,~~

~~wherein when Y^1 and Y^3 in formula I are different groups, the stereochemistry at carbon a is either substantially R or substantially S, and~~

~~wherein the compound having the formula I is not 1-acyl-*sn*-glycerol-3-phosphate and 2-acyl-*sn*-glycerol-3-phosphate.~~

79. (Withdrawn-currently amended) A method for maintaining or terminating embryonic development in a subject comprising administering to the subject a compound of claim 1. ~~having the formula I or VII or a pharmaceutical composition thereof~~





~~wherein~~

~~X^1, X^3, Y^1, and Y^3 comprises, independently, hydrogen, fluorine, a hydroxyl group, a branched or straight chain C_1 to C_{25} alkyl group, OR^3, $OCH_2CH_2OR^3$, $OC(O)R^3$, or $NC(O)R^3$;~~

~~each U comprises, independently, oxygen, sulfur, or NR^1;~~

~~V is not present or when V is present, V comprises oxygen or sulfur;~~

~~W comprises oxygen or sulfur;~~

~~Z comprises oxygen, sulfur, NR^1, CH_2, CHF, CF_2, or $CHOR^3$;~~

~~each R^1 comprises, independently, hydrogen, a branched or straight chain C_1 to C_{25} alkyl group, a cationic counterion, or both R^1 form a cyclic or heterocyclic group;~~

~~R^3 comprises hydrogen, a branched or straight chain C_1 to C_{25} alkyl group, a cycloalkyl group, a heterocycloalkyl group, an aryl group, a heteroaryl group or a protecting group;~~

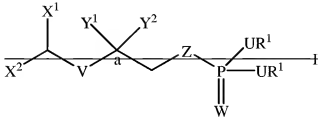
~~R^3 comprises a branched or straight chain C_1 to C_{25} alkyl group, a cycloalkyl group, a heterocycloalkyl group, an aryl group, a heteroaryl group,~~

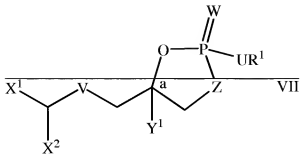
~~or the pharmaceutically acceptable salt or ester thereof,~~

~~wherein when Y^1 and Y^2 in formula I are different groups, the stereochemistry at carbon a is either substantially R or substantially S, and~~

~~wherein the compound having the formula I is not 1-acyl-*sn*-glycerol 3-phosphate and 2-acyl-*sn*-glycerol 3-phosphate.~~

80. (Withdrawn-currently amended) A method for eliciting or inhibiting platelet aggregation in a subject comprising administering to the subject a compound <u>of claim 1</u>, ~~having the formula I or VII or a pharmaceutical composition thereof~~





wherein

X^1, X^2, Y^1, and Y^2 comprises, independently, hydrogen, fluorine, a hydroxyl group, a branched or straight chain C_1 to C_{25} alkyl group, OR^3, $OCH_2CH_2OR^3$, $OC(O)R^3$, or $NC(O)R^3$;

each U comprises, independently, oxygen, sulfur, or NR^4;

V is not present or when V is present, V comprises oxygen or sulfur;

W comprises oxygen or sulfur;

Z comprises oxygen, sulfur, NR^4, CH_2, CHF, CF_2, or $CHOR^3$;

each R^4 comprises, independently, hydrogen, a branched or straight chain C_1 to C_{25} alkyl group, a cationic counterion, or both R^4 form a cyclic or heterocyclic group;

R^3 comprises hydrogen, a branched or straight chain C_1 to C_{25} alkyl group, a cycloalkyl group, a heterocycloalkyl group, an aryl group, a heteroaryl group or a protecting group;

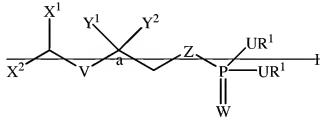
R^3 comprises a branched or straight chain C_1 to C_{25} alkyl group, a cycloalkyl group, a heterocycloalkyl group, an aryl group, a heteroaryl group,

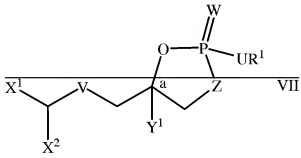
or the pharmaceutically acceptable salt or ester thereof,

wherein when Y^1 and Y^3 in formula I are different groups, the stereochemistry at carbon a is either substantially R or substantially S, and

wherein the compound having the formula I is not 1-acyl *sn*-glycerol 3-phosphate and 2-acyl *sn*-glycerol 3-phosphate.

81. (Withdrawn-currently amended) A method for increasing or inhibiting cell growth and proliferation in a culture comprising contacting the cells in the culture with a compound of claim 1. ~~having the formula I or VII or a pharmaceutical composition thereof~~





~~wherein~~

~~X^1, X^2, Y^1, and Y^2 comprises, independently, hydrogen, fluorine, a hydroxyl group, a branched or straight chain C_1 to C_{25} alkyl group, OR^3, $OCH_2CH_2OR^3$, $OC(O)R^3$, or $NC(O)R^3$;~~

~~each U comprises, independently, oxygen, sulfur, or NR^1;~~

~~V is not present or when V is present, V comprises oxygen or sulfur;~~

~~W comprises oxygen or sulfur;~~

~~Z comprises oxygen, sulfur, NR^1, CH_2, CHF, CF_2, or $CHOR^3$;~~

~~each R^1 comprises, independently, hydrogen, a branched or straight chain C_1 to C_{25} alkyl group, a cationic counterion, or both R^1 form a cyclic or heterocyclic group;~~

~~R^2 comprises hydrogen, a branched or straight chain C_1 to C_{25} alkyl group, a cycloalkyl group, a heterocycloalkyl group, an aryl group, a heteroaryl group or a protecting group;~~

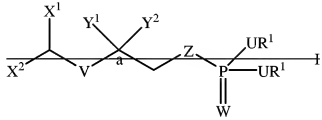
~~R^3 comprises a branched or straight chain C_1 to C_{25} alkyl group, a cycloalkyl group, a heterocycloalkyl group, an aryl group, a heteroaryl group,~~

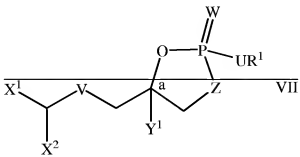
~~or the pharmaceutically acceptable salt or ester thereof;~~

~~wherein when Y^1 and Y^2 in formula I are different groups, the stereochemistry at carbon a is either substantially R or substantially S, and~~

~~wherein the compound having the formula I is not 1-acyl-*sn*-glycerol 3-phosphate and 2-acyl-*sn*-glycerol 3-phosphate.~~

82. (Withdrawn-currently amended) A method of treating or preventing a disease in a subject comprising administering a compound ~~having the formula I or VII or a pharmaceutical composition~~ of claim 1 thereof as a PPARγ agonist.





~~wherein~~

~~X^1, X^2, Y^1, and Y^2 comprises, independently, hydrogen, fluorine, a hydroxyl group, a branched or straight chain C_1 to C_{25} alkyl group, OR^3, $OCH_2CH_2OR^3$, $OC(O)R^3$, or $NC(O)R^3$;~~

~~each U comprises, independently, oxygen, sulfur, or NR^1;~~

~~V is not present or when V is present, V comprises oxygen or sulfur;~~

~~W comprises oxygen or sulfur;~~

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~~each R^1 comprises, independently, hydrogen, a branched or straight chain C_1 to C_{25} alkyl group, a cationic counterion, or both R^1 form a cyclic or heterocyclic group;~~

~~R^3 comprises hydrogen, a branched or straight chain C_1 to C_{25} alkyl group, a cycloalkyl group, a heterocycloalkyl group, an aryl group, a heteroaryl group or a protecting group;~~

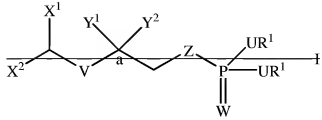
~~R^3 comprises a branched or straight chain C_1 to C_{25} alkyl group, a cycloalkyl group, a heterocycloalkyl group, an aryl group, a heteroaryl group,~~

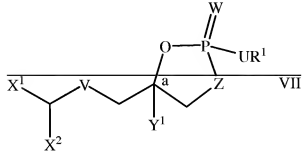
~~or the pharmaceutically acceptable salt or ester thereof,~~

~~wherein when Y^1 and Y^2 in formula I are different groups, the stereochemistry at carbon a is either substantially R or substantially S, and~~

~~wherein the compound having the formula I is not 1-acyl-*sn*-glycerol-3-phosphate and 2-acyl-*sn*-glycerol-3-phosphate.~~

83. (Withdrawn-currently amended) A method of treating or preventing a disease in a subject comprising administering a compound ~~having the formula I or VII or a pharmaceutical composition thereof~~ of claim 1 to inhibit a lipid phosphatase, lipid kinase, or phospholipase enzyme.





wherein

~~X^1, X^2, Y^1, and Y^2 comprises, independently, hydrogen, fluorine, a hydroxyl group, a branched or straight chain C_1 to C_{25} alkyl group, OR^3, $OCH_2CH_2OR^3$, $OC(O)R^3$, or $NC(O)R^3$;~~

~~each U comprises, independently, oxygen, sulfur, or NR^1;~~

~~V is not present or when V is present, V comprises oxygen or sulfur;~~

~~W comprises oxygen or sulfur;~~

~~Z comprises oxygen, sulfur, NR^1, CH_2, CHF, CF_2, or $CHOR^3$;~~

~~each R^1 comprises, independently, hydrogen, a branched or straight chain C_1 to C_{25} alkyl group, a cationic counterion, or both R^1 form a cyclic or heterocyclic group;~~

~~R^3 comprises hydrogen, a branched or straight chain C_1 to C_{25} alkyl group, a cycloalkyl group, a heterocycloalkyl group, an aryl group, a heteroaryl group or a protecting group;~~

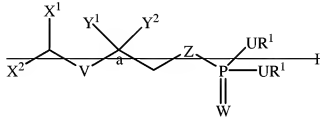
~~R^3 comprises a branched or straight chain C_1 to C_{25} alkyl group, a cycloalkyl group, a heterocycloalkyl group, an aryl group, a heteroaryl group,~~

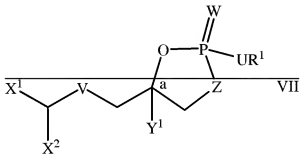
~~or the pharmaceutically acceptable salt or ester thereof;~~

~~wherein when Y^1 and Y^2 in formula I are different groups, the stereochemistry at carbon a is either substantially R or substantially S, and~~

~~wherein the compound having the formula I is not 1-acyl *sn*-glycerol-3-phosphate and 2-acyl *sn*-glycerol-3-phosphate.~~

84. (Withdrawn-currently amended) The use of a compound of claim 1 ~~having the formula I or VII or a pharmaceutical composition thereof~~ for targeting the discovery of a drug.





~~wherein~~

~~X^1, X^2, Y^1, and Y^2 comprises, independently, hydrogen, fluorine, a hydroxyl group, a branched or straight chain C_1 to C_{25} alkyl group, OR^3, $OCH_2CH_2OR^3$, $OC(O)R^3$, or $NC(O)R^3$;~~

~~each U comprises, independently, oxygen, sulfur, or NR^1;~~

~~V is not present or when V is present, V comprises oxygen or sulfur;~~

~~W comprises oxygen or sulfur;~~

~~Z comprises oxygen, sulfur, NR^1, CH_2, CHF, CF_2, or $CHOR^3$;~~

~~each R^1 comprises, independently, hydrogen, a branched or straight chain C_1 to C_{25} alkyl group, a cationic counterion, or both R^1 form a cyclic or heterocyclic group;~~

~~R^3 comprises hydrogen, a branched or straight chain C_1 to C_{25} alkyl group, a cycloalkyl group, a heterocycloalkyl group, an aryl group, a heteroaryl group or a protecting group;~~

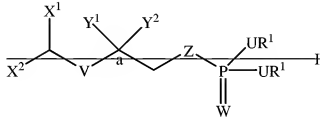
~~R^3 comprises a branched or straight chain C_1 to C_{25} alkyl group, a cycloalkyl group, a heterocycloalkyl group, an aryl group, a heteroaryl group,~~

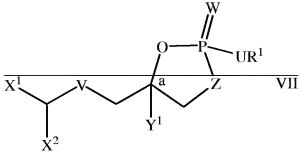
~~or the pharmaceutically acceptable salt or ester thereof,~~

~~wherein when Y^1 and Y^2 in formula I are different groups, the stereochemistry at carbon a is either substantially R or substantially S, and~~

~~wherein the compound having the formula I is not 1-acyl *sn*-glycerol 3-phosphate and 2-acyl-*sn*-glycerol 3-phosphate.~~

85. (Withdrawn-currently amended) A method for growing or proliferating cells in a culture comprising administering to the cells in the culture a compound of claim 1. ~~having the formula I or VII or a pharmaceutical composition thereof~~





~~wherein~~

~~X^1, X^2, Y^1, and Y^2 comprises, independently, hydrogen, fluorine, a hydroxyl group, a branched or straight chain C_1 to C_{25} alkyl group, OR^2, $OCH_2CH_2OR^2$, $OC(O)R^3$, or $NC(O)R^3$;~~

~~each U comprises, independently, oxygen, sulfur, or NR^1;~~

~~V is not present or when V is present, V comprises oxygen or sulfur;~~

~~W comprises oxygen or sulfur;~~

~~Z comprises oxygen, sulfur, NR^1, CH_2, CHF, CF_2, or $CHOR^2$;~~

~~each R^1 comprises, independently, hydrogen, a branched or straight chain C_1 to C_{25} alkyl group, a cationic counterion, or both R^1 form a cyclic or heterocyclic group;~~

~~R^2 comprises hydrogen, a branched or straight chain C_1 to C_{25} alkyl group, a cycloalkyl group, a heterocycloalkyl group, an aryl group, a heteroaryl group or a protecting group;~~

~~R^3 comprises a branched or straight chain C_1 to C_{25} alkyl group, a cycloalkyl group, a heterocycloalkyl group, an aryl group, a heteroaryl group,~~

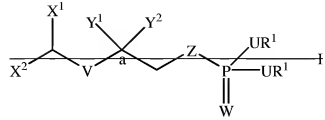
~~or the pharmaceutically acceptable salt or ester thereof,~~

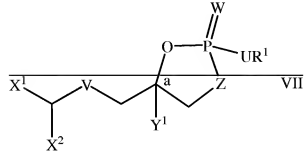
~~wherein when Y^1 and Y^2 in formula I are different groups, the stereochemistry at carbon a is either substantially R or substantially S, and~~

~~wherein the compound having the formula I is not 1-acyl-*sn*-glycerol-3-phosphate and 2-acyl-*sn*-glycerol-3-phosphate.~~

86. (Withdrawn-currently amended) A method for determining the activity of lysophosphatidic acid or phosphatidic acid, comprising the steps of:

a) measuring the activity of a compound of claim 1 ~~having the formula I or VII~~





wherein

X^1, X^2, Y^1, and Y^2 comprises, independently, hydrogen, fluorine, a hydroxyl group, a branched or straight chain C_1 to C_{25} alkyl group, OR^3, $OCH_2CH_2OR^3$, $OC(O)R^3$, or $NC(O)R^3$;

each U comprises, independently, oxygen, sulfur, or NR^1;

V is not present or when V is present, V comprises oxygen or sulfur;

W comprises oxygen or sulfur;

Z comprises oxygen, sulfur, NR^1, CH_2, CHF, CF_2, or $CHOR^3$;

each R^1 comprises, independently, hydrogen, a branched or straight chain C_1 to C_{25} alkyl group, a cationic counterion, or both R^1 form a cyclic or heterocyclic group;

R^3 comprises hydrogen, a branched or straight chain C_1 to C_{25} alkyl group, a cycloalkyl group, a heterocycloalkyl group, an aryl group, a heteroaryl group or a protecting group;

R^3 comprises a branched or straight chain C_1 to C_{25} alkyl group, a cycloalkyl group, a heterocycloalkyl group, an aryl group, a heteroaryl group, or the pharmaceutically acceptable salt or ester thereof,

~~wherein when Y^1 and Y^2 in formula I are different groups, the stereochemistry at carbon a is either substantially R or substantially S, and~~

~~wherein the compound having the formula I is not 1-acyl *sn*-glycerol 3-phosphate and 2-acyl *sn*-glycerol 3-phosphate~~; and

b) measuring the same activity of lysophosphatidic acid or phosphatidic acid.

87. (Withdrawn) The method of claim 86, wherein the method comprises identifying agonists or antagonists of lysophosphatidic acid binding to or activating lysophosphatidic acid receptors of the edg class in a cell.

88. (Withdrawn) The method of claim 86, wherein the method comprises identifying agonists or antagonists of lysophosphatidic acid binding to or activating lysophosphatidic acid receptors of the non-edg class in a cell.